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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/884,219

Applicants : Kars-Michiël Hubert Lenssen;
Antonius Emilius Theodorus Kuiper

Title of Invention : MAGNETO-RESISTIVE DEVICE WITH A
MAGNETIC MULTILAYER STRUCTURE

Date Filed : June 19, 2001

T.C./AU : 2862

Examiner : STRECKER, Gerard R.

Docket No. : NL 000361

file only

Mail Stop Non-fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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AMENDMENT

Sir:

This is responsive to the Office Action dated August 26, 2003, in connection with the above-referenced patent application.

Amendment to the claims is reflected from a complete list of the claims starting from

Page 2. Only claim 1 is amended in this response.

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to any of the CoFe layer of the pinned structure, as defined in amended claim 1. In fact, the Cu layer in the Gill patents is NOT contiguous with CoFe layer of the pinned structure. To the contrary, the Gill patents teach that the Cu layer is placed between the oxide layer and the free layer so as to improve the biasing of the free layer structure and promote symmetrical read-back signals (col. 8, lines 34-45, of the '363 patent).

Applicants respectfully disagree with the assertion of the Examiner that combining the Gill patents with the other cited patents renders the present invention obvious. In particular, none of the other three cited patents Olivas et al (US Patent No. 6,507,187), Sano et al (US Patent No. 6,430,012) or Sasaki et al (US Patent No. 6,563,681) discloses a pinned ferromagnetic layer that comprises an AAF layer system which includes at least one CoFe layer. Therefore, none of these three patents can provide a teaching or suggestion that the Cu layer, which separates the pinned layer and the free layer, is contiguous with a CoFe layer of an AAF layer. Thus, the applicants submit that no combinations of the teachings of these patents and the Gill patents can result in a Cu layer is contiguous with the CoFe layer of the AAF layer system, as recited in amended claim 1. Moreover, there is no motivation or suggestion in any of the cited patents for a combination that would result in the present invention as defined.

Therefore, Applicants believe that amended claim 1 is not obvious over any combinations of the cited patents, and thus is believed patentable. At least for the same reasons, Applicants submit that dependent claims 3-11 are also patentable as each of them includes all the features in claim 1.

Thus, the applicants respectfully request reconsideration and allowance of the application in view of the amendment and above explanations. The Examiner is authorized to deduct any fees believed due from our Deposit Account No. 11-0223.